U.S. FISH AND WILDLIFE SERVICE SPECIES ASSESSMENT AND LISTING PRIORITY ASSIGNMENT FORM

SCIENTIFIC NAME: Astragalus tortipes
COMMON NAME: Sleeping Ute milkvetch
LEAD REGION: Region 6
INFORMATION CURRENT AS OF: October 15, 2005
STATUS/ACTION: Species assessment - determined species did not meet the definition of endangered or threatened under the Act and, therefore, was not elevated to Candidate status New candidate Non-petitioned Non-petitioned Non-petitioned - Date petition received: 05/11/2004 90-day positive - FR date: 12-month warranted but precluded - FR date: Did the petition requesting a reclassification of a listed species?
FOR PETITIONED CANDIDATE SPECIES: a. Is listing warranted (if yes, see summary of threats below)? YES b. To date, has publication of a proposal to list been precluded by other higher priority listing actions? YES c. We find that the immediate issuance of a proposed rule and timely promulgation of a final rule for this species has been, for the preceding 12 months, and continues to be, precluded be higher priority listing actions (including candidate species with lower LPNs). During the past 12 months, almost our entire national listing budget has been consumed by work on various listing actions to comply with court orders and court-approved settlement agreements, meeting statutory deadlines for petition findings or listing determinations, emergency listing evaluations and determinations, and essential litigation-related, administrative, and program management tasks. We will continue to monitor the status of this species as new information becomes available. This review will determine if a change is status is warranted, including the need to make prompt use of emergency listing procedures. For information on listing actions taken over the past 12 months, see the discussion of "Progress on Revising the Lists," in the current CNOR which can be viewed on our Internet website (http://endangered.fws.gov/). _X_ Listing priority change Former LP: 8_
New LP: 11 Date when the species first became a Candidate (as currently defined):02/28/1996

ANIMAL/PLANT GROUP AND FAMILY: Flowering plant, Fabaceae

HISTORICAL STATES/TERRITORIES/COUNTRIES OF OCCURRENCE: Colorado

CURRENT STATES/ COUNTIES/TERRITORIES/COUNTRIES OF OCCURRENCE: Montezuma County, Colorado

LAND OWNERSHIP: This species occurs solely on Ute Mountain Ute Indian Tribal lands. The Towaoc Canal was constructed by the Bureau of Reclamation, which has jurisdiction over the canal itself and associated rights-of-way. The canal is approximately 3 meters (10 feet) wide where it bisects the milkvetch colonies and the road right-of-way is approximately 6 meters (20 feet) wide including shoulders. The Dolores Water Conservancy District and the Ute Mountain Ute Tribe share operation and maintenance duties.

LEAD REGION CONTACT: Pat Mehlhop, (303) 236-4215

LEAD FIELD OFFICE CONTACT: Ellen Mayo, (970) 243-2778, extension 14

BIOLOGICAL INFORMATION

Species Description

Plants are robust, 60-80 centimeters (24-32 inches) tall. Leaves have 9-15 leaflets. Flowers are lemon yellow. Pods are free of hairs, laterally compressed, with twisted pedicels that cause the pods to stand erect.

Timing of initiation of spring growth varies from year to year in response to favorable temperature and moisture, and the life cycle from flowering to fruiting is completed in about 2 weeks.

Taxonomy

This species was first discovered in 1985 and published as a new species by Anderson and Porter in 1994.

Habitat

Astragalus tortipes grows in scattered colonies on the lower slopes of ridges and knolls between 1,585-1,768 meters (5,200-5,800 feet) elevation in a mixed desert scrub community with several other "Four Corners" endemics such as *Eriogonum clavellatum* and *Astragalus cronquistii* (Anderson and Porter 1994).

Historical Range/Distribution

Unknown.

Current Range/Distribution

This species is found on the Ute Mountain Ute Indian Reservation in a restricted area on the southeastern flank of Sleeping Ute Mountain, approximately 24 kilometers (15 miles) southwest of Cortez, Montezuma County, Colorado.

A field survey to determine its range, population size, and distribution was conducted in 1989 by Anderson (Anderson and Porter, 1994). General botanical surveys in the only known location with similar habitat (at the foot of the Henry Mountains in Utah) did not find the species (Neese 1980, as cited in Anderson and Porter, 1994). In April and May of 2000, a survey was conducted (Colyer 2000). The surveyors found the milkvetch on 24 of 30 knolls, ridges, or drainage areas surveyed over a 26-square kilometer (10-square mile) area. Though the area encompassing the species' range is about 26,000 hectares (64,000 acres), the plant only occurs on 202 hectares (500 acres) within the range (Colyer 2000). With knowledge of the habitat requirements, it was estimated by the surveyors that the plant's range could extend another 0.8 kilometer (0.5 mile) to the southeast on Ute Mountain Ute land. There have been no funds available for further surveys.

Population Estimates/Status

A total of 3,744 plants were counted during surveys by Colyer (2000). She reported that the plants were reproducing and were not being negatively impacted for the most part. Due to above average precipitation in March of 2000, an otherwise extremely dry year, the plants were able to bloom and produce a seed crop. Year-old seedlings from a wet spring in 1999 accounted for 3-12 percent of the plants in many populations (Colyer 2000). The number of plants in 1991 was estimated to be 2,000-3,000 individuals (Anderson and Porter 1994).

THREATS

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range. The Towaoc Canal was constructed from 1991-1993 through the western end of the plant's range, which impacted four colonies and fragmented the plant's distribution. Previously, this area was not accessible by vehicle, but canal construction has opened the area to vehicle use and associated impacts. The remaining plant populations adjacent to the canal were reported to be stable in 2000.

Excavation of borrow material about 20 years ago destroyed individual plants in an isolated colony 1.6-3.2 kilometers (1-2 miles) north and east of the other colonies. Currently, off-highway vehicle (OHV) use on the hills adjacent to the excavated site is destroying individuals of this same colony. Despite prior and ongoing disturbance, this colony was the sixth largest in 2000. However, OHV use appears to be increasing (Colorado Natural Heritage Program 2004).

Another impact to the habitat was a seismic grid that was laid out through the area in 1985 and 1986 with seismic lines through some of the colonies. However, there was no evidence of the lines during an October 2000 field trip by U.S. Fish and Wildlife Service (Service) and other agency employees.

The Service has no available information to indicate whether there is any current activity or planning for oil or gas drilling in this area. It was classified by the Bureau of Land Management (1999) as having high potential for oil and gas development.

This species occurs a few miles east of an agricultural area (the Ute Farms) being irrigated by the Towaoc Canal. The agricultural area is expected to expand eastward in the future. Potential impacts are unknown.

Any additional activity that results in surface disturbance or alteration of habitat conditions where this species occurs will further threaten its continued existence.

B. Overutilization For Commercial, Recreational, Scientific, or Educational Purposes None known.

C. <u>Disease or Predation</u>.

During the spring 2000 survey, it was observed that a handful of plants were clipped off by Gunnison prairie dogs (*Cynomys gunnisoni*). It is unlikely that with the small number of milkvetch clipped off by the prairie dogs, and with the small numbers of prairie dogs in the area, that prairie dog herbivory is more than a minor threat to the species. Additionally, the prairie dogs and the milkvetch have likely co-existed for hundreds or even thousands of years.

D. The Inadequacy of Existing Regulatory Mechanisms.

No local, State, Federal, or tribal regulations serve to protect or conserve this species. Without a long-term conservation agreement with the Ute Mountain Ute Tribe or without listing and consequent protection under sections 7 and 10 of the Endangered Species Act, infrastructure development, energy development, agriculture expansion and recreational threats could continue to impact this species resulting in its eventual extinction. The Tribe has shown no willingness recently to work with the Service or botanists from the Colorado Natural Areas Program. The Tribe has refused to apply for grants to monitor and manage the species.

E. Other Natural or Manmade Factors Affecting Its Continued Existence.

Cattle trailing could kill some individual plants, particularly along the canal, but this is currently a minor impact and cattle do not appear to graze on the milkvetch. Pollinators can likely fly across the Towaoc Canal so genetic interchange is still possible but there may be some limitation of seed dispersal east and west of the Canal with an unknown impact to the milkvetch. If insecticides or herbicides are applied to future agricultural areas adjacent to Sleeping Ute milkvetch colonies, pesticide drift could occur and impact the milkvetch or its pollinators.

CONSERVATION MEASURES PLANNED OR IMPLEMENTED: A conservation agreement was discussed by the Service with the Ute Mountain Ute Tribe and other involved parties in 1999. After those preliminary meetings no further progress has been made.

SUMMARY OF THREATS

- Rarity: extremely limited range, small population size.
- Destruction of plants by OHVs is said to be increasing.

LISTING PRIORITY

THREAT			
Magnitude	Immediacy	Taxonomy	Priority
High	Imminent	Monotypic genus	1
		Species	2
		Subspecies/population	3
	Non-imminent	Monotypic genus	4
		Species	5
		Subspecies/population	6
Moderate to Low	Imminent	Monotypic genus	7
		Species	8
		Subspecies/population	9
	Non-imminent	Monotypic genus	10
		Species	11*
		Subspecies/population	12

RATIONALE FOR CHANGE IN LISTING PRIORITY NUMBER

We changed the listing priority number for Sleeping Ute milkvetch to an 11 to reflect non-imminent threats from oil and gas exploration and the primary threats of its extremely limited range and low total population count. Existing available information from surveys in 2000 indicates that the species seems to be stable, but we have no current data to confirm the status. There are no reports that threats have escalated appreciably since 2000.

Magnitude: Moderate.

The primary concern for this species is its limited range and low total population counts--in 2000, 3,744 plants were recorded on a specific substrate within a small overall range. Habitat disturbance by OHVs has occurred at low to moderate levels and is reported to be increasing at some of the plant locations. The lack of a conservation agreement with the tribe does not appear to be a major cause for concern at this time, but the lack of current information does not give assurance that the populations are still stable.

Imminence: Non-imminent.

Oil and gas development is active in the area and may be occurring on tribal lands, but the Service has received no information from the tribe to indicate whether there is oil or gas drilling or pipeline construction underway or planned within habitat for the plants. Previous and ongoing threats from a borrow pit excavation, OHVs, irrigation canal construction, and a prairie dog colony have had minor impacts that reduced the range and number of plants by small amounts.

<u>YES</u> Have you promptly reviewed all of the information received regarding the species for the purpose of determining whether emergency listing is needed? Is Emergency Listing Warranted? NO. There is no new information on the status of the species

to indicate that threats have changed.

DESCRIPTION OF MONITORING: There has been no monitoring, research, further work on a conservation agreement, or other prelisting conservation activity conducted for the Sleeping Ute milkvetch since the survey in 2000. Requests to conduct a field visit in 2003 were ignored by the tribe. The Grand Junction office has not had the resources to develop personal contacts with the Ute Mountain Tribe, which is less communicative than other tribes in the area.

COORDINATION WITH STATES: Botanists working for the Colorado Natural Areas Program and for the Colorado Natural Heritage Program have not been able to obtain access to the habitat for the species. They reported at the Statewide meeting that ORV traffic is increasing on the populations (unknown source).

LITERATURE CITED

- Anderson, J.L., and J.M. Porter. 1994. *Astragalus tortipes* (Fabaceae), a new species from desert badlands in southwestern Colorado and its phylogenetic relationships with Astragalus. Systematic Botany 19(1):116-125.
- Bureau of Land Management. 1999. State of Colorado oil and gas potential. Unpublished report. Colorado State Office.
- Colyer, M. 2000. Status report of Sleeping Ute milkvetch *Astragalus tortipes*. National Park Service Report to the Ute Mountain Ute Tribe. 6 pages + photo and map reproductions.
- Department of the Interior, Bureau of Indian Affairs. 1993. Environmental Assessment of oil and Gas Leasing and Development on Ute Mountain Indian Reservation. Albuquerque, New Mexico.
- Colorado Natural Heritage Program. 2004. Minutes from the First Annual Colorado Rare Plant Symposium, Steamboat Springs, Colorado

Regions with removals from all such recor	/CONCURRENCE: Lead Regions must obtain written co in the range of the species before recommending changes, in candidate status and listing priority changes; the Region inmendations. The Director must concur on all resubmitted itions or removal of species from candidate status, and list	including elevations or al Director must approve d 12-month petition
Approve:	/s/ Casey Stemler Acting Regional Director, Fish and Wildlife Service	March 15, 2006 Date
Concur:	Marchallo Jones Ja	August 23, 2006
Concur.	Director, Fish and Wildlife Service	Date
Do not concu	r:	Date